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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,038	10/27/2003	Kevin T. O'Dougherty	N95.12-0015	3887
7590	07/06/2006		EXAMINER	
William F. Ryann ATMI, Inc. 7 Commerce Drive Danbury, CT 06810				PRICE, CRAIG JAMES
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/694,038	O'DOUGHERTY ET AL.	
	Examiner Craig Price	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 05 April 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
 4a) Of the above claim(s) 3,15 and 21 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,2,4-14,16-20 and 22-24 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) 1-24 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 27 December 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Species A remains the elected invention. Applicant has requested a switch the election to species B. The traversal is on the ground(s) that the species can be searched without a burden to the examiner, and refers to MPEP 819.01. This is not found persuasive because the MPEP section of 819, refers to a request for continued examination and there is no listing of 819.01 within the manual. The office does not permit a shift of election.

The requirement is still deemed proper and is therefore made FINAL.

Claims 3,15, and 21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5 April 2006.

This application contains claims 3,15 and 21 drawn to an invention nonelected with traverse in the paper filed on 5 April 2006. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1,6,7,13,17,18,19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priebe et al.(US 2003/0075566) in view of Ueda et al. (4,398,652).

Regarding claim 1, Priebe et al. disclose a liquid dispensing and recirculating system comprising, a container (42) having a mouth (46), a cap (see attached sheet figure 2) for coupling with the mouth, a connector (44, connector head) for coupling with

the cap, the connector further comprising, a connector head, and a probe (50) extending from the connector head and insertable through the cap and into the mouth, the probe having a flow passage therein which terminates near a probe tip, pump means coupled (Page 4,para.0069) with the probe and with the flow passage (56) for pumping fluid in the container through the probe and the flow passage, and fluid return means (Figure 6,112,114,116) formed (116) on the probe for returning recirculated fluid to the fluid in the container such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container (Page 4, para. 0062, The flow of the re-circulated liquid...causes much less liquid turbulence and formation of air bubbles...).

Regarding claim 6, Priebe et al. disclose that the fluid return means includes a bore (60) formed at the area proximate to the connector head for delivering the recirculated fluid to the fluid return means.

Regarding claim 7, Priebe et al. disclose that the bore is sized such that recirculated fluid remains within the fluid return means as it is returned to the container (Page 3, para.0053 thru 0056).

Regarding claim 13, Priebe et al. disclose that the pressure assist port (Figure 4A) that is coupled to an external pressure source for introducing pressurized gas into the container to facilitate flow of the fluid from the container (Page 4, para.0067).

Priebe et al. has disclosed all of the features of the claimed invention but lacks a channel extending longitudinally along an exterior of the probe.

Ueda et al. discloses a dispensing system, which teaches the probe having a channel (13) extending longitudinally along an exterior of the probe (figures 8-10B).

In view of the Ueda et al. patent, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the channel extending longitudinally along an exterior of the probe of Ueda et al. onto the probe of Priebe et al. in order to have a probe which can be made into a compact structure (Col. 9, Lns. 8-16).

3. Claims 17,18,19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osgar (US 5,526,956) in view of Ueda et al. (4,398,652).

Regarding claim 17, Osgar discloses that the means for the method of dispensing and recirculating liquids comprises a container (12) having a mouth (34) which communicates with an interior of the container, attaching a cap (14) over the mouth, coupling a connector (202,212) to the cap, wherein the connector includes a probe (24,26,50,208), defining a fluid passage (116) terminating within the interior of the container at a tip of the probe, defining a fluid return channel (60,270) on the probe, dispensing fluid from the container through the fluid passage (268), and refilling fluid into the container through the fluid return channel such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container. The air releases up through the fluid after the fluid enters the container through the return channel (60).

Regarding claim 18, Osgar discloses that the steps of dispensing fluid from the container and refilling fluid into the container are performed simultaneously (Col.1, Lns.14-18).

Regarding claim 19, Osgar discloses that the step of refilling fluid into the container comprises of recirculating the dispensed liquid back into the container through the fluid return channel (Col 2, Lns. 10-13).

Regarding claim 24, Osgar discloses that the fluid return channel includes a bore (60,270) formed at the area proximate to the connector head for delivering the fluid to the fluid channel.

Osgar has disclosed all of the features of the claimed invention but lacks a channel extending longitudinally along an exterior of the probe.

Ueda et al. discloses a dispensing system, which teaches the probe having a channel (13) extending longitudinally along an exterior of the probe (figures 8-10B).

In view of the Ueda et al. patent, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the channel extending longitudinally along an exterior of the probe of Ueda et al. onto the probe of Osgar, in order to have a probe which can be made into a compact structure (Col. 9, Lns. 8-16).

4. Claims 1,2,4,5,6,7,14,16,17-20 and 22- 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qutub (US 5,601,066) in view of Zoder (US 2,240,277) and further in view of Ueda et al. (4,398,652).

Regarding claim 1, Qutub discloses a liquid dispensing and recirculating fuel system comprising, a container (12) having a mouth (above 16,40, through the wall of the container), a probe (42), the probe having a flow passage therein which terminates near a probe tip (39), and fluid return means (Figure 5,43) formed on the

probe for returning recirculated fluid to the fluid in the container such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container. The air "released above the fluid" is the ultimate destination of air from the fuel.

Qutub discloses all of the claimed invention except for a cap for coupling with the mouth, a connector having a connector head for coupling with the cap and pump means coupled with the probe and with the flow passage for pumping fluid in the container through the probe and the flow passage.

Zoder teaches the use of a fuel recirculating system (Col. 4, Lns. 32-35) having a cap (7) for coupling with the mouth, a connector (13) having a connector head for coupling with the cap and pump means coupled with the probe and with the flow passage for pumping fluid in the container through the probe and the flow passage (Col. 4, Lns. 32-35).

Firstly, In view of the Zoder patent, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize a cap for coupling with the mouth, a connector having a connector head for coupling with the cap as taught by Zoder onto the container of Qutub in order to permit replacement of the probe for service.

Secondly, In view of the Zoder patent, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize a pump as taught by Zoder onto the system of Qutub coupled with the probe and with the flow passage for pumping fluid in the container through the probe and the flow passage, in order withdraw gasoline from the tank (Col. 4, Lns. 32-35).

Qutub and Zoder have disclosed all of the features of the claimed invention but lacks a channel extending longitudinally along an exterior of the probe.

Ueda et al. discloses a dispensing system, which teaches the probe having a channel (13) extending longitudinally along an exterior of the probe (figures 8-10B).

In view of the Ueda et al. patent, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the channel extending longitudinally along an exterior of the probe of Ueda et al. onto the probe of Qutub and Zoder, in order to have a probe which can be made into a compact structure (Col. 9, Lns. 8-16).

Regarding claims 2,4 and 5, Qutub discloses that the fluid return means is a fluid channel (43), formed along an exterior of the probe from an area proximate to the connector head to an area proximate to the probe tip, having a uniform depth, extending along the probe substantially parallel with the flow passage, as seen in Figure 5.

Regarding claims 6 and 7, Qutub discloses that the fluid return means includes a bore (86,88) formed at the area proximate to the connector head for delivering the recirculated fluid to the fluid return means and the bore is sized such that recirculated fluid remains within the fluid return means as it is returned to the container as shown in Figure 7.

Regarding claims 14 and 16, Qutub discloses a probe (42) for dispensing liquid from and returning liquid to a container comprising of a flow passage (inside of 38) extending through the probe from a first end of the probe to a second end of the probe, a fluid return port (24) and a fluid return channel (43) in fluid communication with the

Art Unit: 3753

fluid return port via a bore (86,88), the fluid return channel extending longitudinally along an exterior of the probe substantially parallel to the flow passage from the bore to about the second end of the probe (Figure 5).

Regarding claims 17-20,22,23 and 24, the device as combined with Qutub, Zoder and Ueda et al. will perform the methods as recited in claims 17-20, 22,23 and 24, during normal operational use of the device, the method of making or using the device is inherent in using the apparatus.

5. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priebe et al. (US 2003/0075566) in view of Osgar et al. (US 5,875,921), as applied to claim 1, and further in view of Ueda et al. (4,398,652).

Priebe et al. disclose a liquid dispensing and recirculating system comprising, a container (42) having a mouth (46), a cap (see attached sheet figure 2) for coupling with the mouth, a connector (44, connector head) for coupling with the cap, the connector further comprising, a connector head, and a probe (50) extending from the connector head and insertable through the cap and into the mouth, the probe having a flow passage therein which terminates near a probe tip, pump means coupled (Page 4,para.0069) with the probe and with the flow passage (56) for pumping fluid in the container through the probe and the flow passage, and fluid return means (Figure 6,112,114,116) formed (116) on the probe for returning recirculated fluid to the fluid in the container such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container (Page 4,para. 0062, The flow of the re-circulated liquid...causes much less liquid turbulence and formation of air bubbles...).

Regarding claims 8-12, Priebe et al. disclose all of the features of the claimed invention except that the;

- a) the cap includes a first key element and the connector includes a second key element configured to mate with the first key element,
- b) sensor means for sensing when the first and second key elements are mated and for sensing when the first and second key elements are not mated,
- c) the sensor means comprises a detector mounted on the connector and a detector affecting element mounted on the cap, the detector mounted on the connector having two states, one state when the first and second key codes are mated and the cap and connector are coupled in a predetermined orientation and a second state when the first and second key codes are not mated and the cap and connector are not coupled in the predetermined orientation, and
- d) controller means coupled with the sensor means and the pump means such that the controller means enables the pump means when the sensor means senses that the first and second key elements are mated and disables the pump means when the sensor means senses that the first and second key elements are not mated.

Osgar et al. ('921) disclose a dispensing system, used for photoresists (Col. 1, Lns. 5- 8), which are used in Semiconductor manufacturing processes, that teaches the use of;

- a) the cap includes a first key element and the connector includes a second key element configured to mate with the first key element (Col.1, Lns. 51-51),
- b) sensor means for sensing when the first and second key elements are mated

Art Unit: 3753

and for sensing when the first and second key elements are not mated (Col.1, Lns. 60-62),

c) the sensor means comprises a detector mounted on the connector and a detector affecting element mounted on the cap, the detector mounted on the connector having two states, one state when the first and second key codes are mated and the cap and connector are coupled in a predetermined orientation and a second state when the first and second key codes are not mated and the cap and connector are not coupled in the predetermined orientation (Col. 2, Lns. 1-13), and

d) controller means coupled with the sensor means and the pump means such that the controller means enables the pump means when the sensor means senses that the first and second key elements are mated and disables the pump means when the sensor means senses that the first and second key elements are not mated (Col. 2, Lns. 62 –67 onto Col. 3, Lns. 1-7).

In view of the Osgar et al. ('921) patent, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize the cap having a first and second key element, the sensor means and the controller means of Osgar et al.('921) onto the dispensing system of Priebe et al. in order to ensure that personnel will not attach the wrong chemical to the wrong process at the wrong time as taught by Osgar ('921, Col. 1, Lns.40 – 42).

Osgar and Priebe et al. have disclosed all of the features of the claimed invention but lacks a channel extending longitudinally along an exterior of the probe.

Ueda et al. discloses a dispensing system, which teaches the probe having a channel (13) extending longitudinally along an exterior of the probe (figures 8-10B).

In view of the Ueda et al. patent, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the channel extending longitudinally along an exterior of the probe of Ueda et al. onto the probe of Osgar and Priebe et al. in order to have a probe which can be made into a compact structure (Col. 9, Lns. 8-16).

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1 and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 8 of copending Application No. 10/247107 in view of Osgar (US 5,875,921) and further in view of Ueda et al.'652.

Claim 1 of application 10/247107 shows all of the features of the claimed invention except the cap, and the pump. The connector and dip tube of application 10/247107 is seen as the same structure as the connector head and probe of the instant application. Osgar et al. ('921) shows a cap (62) and a pump (18). It would have been obvious to one of ordinary skill in the art at the time of invention to utilize a cap, and pump as taught by Osgar et al. ('921), onto the opening of the container (vessel) of application 10/247107 in order to permit removal of the connector head for service. It would have been obvious to provide a pump to move fluid. Osgar and copending applicant have disclosed all of the features of the claimed invention but lacks a channel extending longitudinally along an exterior of the probe.

Ueda et al. discloses a dispensing system, which teaches the probe having a channel (13) extending longitudinally along an exterior of the probe (figures 8-10B).

In view of the Ueda et al. patent, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the channel extending longitudinally along an exterior of the probe of Ueda et al. onto the probe of Osgar and Copending applicant in order to have a probe which can be made into a compact structure (Col. 9, Lns. 8-16).

The limitations from claim 13 are present in claim 8 of '107.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

8. Applicant's arguments filed on 5 April 2006 have been fully considered but they are not persuasive.

In your argument regarding the use of Zoder with Qutub, Zoder is used for a reference in supplying a cap and pump. Furthermore Zoder discloses that the tank recirculates fuel, through the use of suction line 99 in column 4, lines 32-35.

In your arguments regarding that a "flow path extend longitudinally along an exterior", Ueda et al. has been introduced to provide an exterior flow path on a probe/dip tube in order to have a probe which can be made of a compact structure.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM M-R.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



ERIC KEASEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

Art Unit: 3753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP



26 June 2006